Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Laurel Public School District 7, 410 Colorado Avenue, Laurel, MT 59044

2. Type of action: Application for Beneficial Water Use Permit 43Q 30106232

3. Water source name: Groundwater

4. Location affected by project: Section 9 and 10 T2S R24E, Yellowstone County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The applicant proposes to divert water from the groundwater, by means of an approximately 55 foot deep well, from May 1 to September 30 at 150 GPM up to 33.1 AF, from a point in the NESENE Section 9 T2S R24E, Yellowstone County for lawn and garden Irrigation use from May 1 to September 30. The Applicant proposed to irrigate lawn and garden on approximately 13 acres. The place of use is generally located at the Laurel Middle School in the E2SENE Section 9 T2S R24E, Yellowstone County. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)
Montana Department of Natural Resources and Conservation
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
Montana Natural Heritage Program
United States Fish and Wildlife Service
United States Natural Resource Conservation Service

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **–** The source of water is groundwater and therefore not identified by the Montana Department of Fish, Wildlife and Parks as chronically or periodically dewatered. The groundwater appropriation will deplete the Yellowstone River in a reach by Laurel. The Yellowstone River is identified as periodically dewatered. The depletion to the Yellowstone River is a maximum of less than 40 GPM and will not worsen the existing conditions.

Determination: No Significant Impact

Water quality **–** No impact to water quality of any surface water is predicted from a groundwater well where water is used for lawn and garden irrigation on an existing school property.

Determination: No Impact

Groundwater **–** The appropriation would take 150 GPM up to 33.1 AF from the groundwater. Analysis by Department of Natural Resources and Conservation hydrogeologists indicates that the amount of groundwater is greater than all legal demands and groundwater supply will not be negatively affected. No effect on groundwater quality is predicted. The appropriation will have a limited depletion to the Yellowstone River.

Determination: No Significant Impact

DIVERSION WORKS - The irrigation system is in place and has been operational using a different source of water. The well is completed. The diversion works is a pump in the well attached to the existing sprinkler system. No channel impacts, barriers, flow modifications or effects to riparian areas will occur. The well was drilled by a licensed well driller.

Determination: No Impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **–** The Montana Natural Heritage Program lists 11 animal species of concern and 0 plant species of concern in T2S R24E. The 11 animal species are the Black-tailed Prairie Dog, Bard's Sparrow, Great Blue Heron, Yellow-billed Cuckoo, Bobolink, Pinyon Jay, Green-tailed Towhee, Brewer's Sparrow, Spiny Softshell, Sauger and the Alberta Snowfly. Use of groundwater for irrigation of the grounds at an existing Middle School in a largely developed and urban area will not change any barriers or alter the availability of habitat.

Determination: No Significant Impact

Wetlands **–** There are several palustrine emergent wetlands along the terrace to the north of the proposed project area according to mapping by the United States Fish and Wildlife Service. These wetlands are fed by a series of irrigation canals and are not hydraulically connected to the source aquifer for this project. The project does not include creation or removal of wetlands.

Determination: No Impact

Ponds **–** No ponds are proposed.

Determination: No Impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE – The area is dominated by Lohmiller soils with uniformly low slopes. No change in soil stability is likely. Use of sprinklers to water landscaping at the school is not likely to degrade soil quality and may increase to a small degree soil moisture. Lohmiller soils are very slightly to slightly saline, well drained and composed primarily of silty clay loam.

Determination: No Impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS – Existing vegetative cover is landscaping for the existing Middle School. No change to existing vegetative cover is proposed.

Determination: No Impact

AIR QUALITY – Use of groundwater for lawn and garden irrigation has no potential to degrade air quality.

Determination: No Impact

HISTORICAL AND ARCHEOLOGICAL SITES – The project is not located on State or Federal land.

Determination: Not Applicable

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No impacts on environmental resources not addressed are recognized.

Determination: No Impact

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS – The irrigation is not subject to any locally adopted environmental plans. Use of groundwater will help the City of Laurel meet local water demands.

Determination: No Impact

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES – There are no recreational or wilderness areas in close proximity to the project area and no access to such areas within the project area.

Determination: No Impact

HUMAN HEALTH – Irrigation of landscaping at a school has no potential to negatively affect human health.

Determination: No Impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No__**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No Impact

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No Significant Impact

(b) *Local and state tax base and tax revenues?* No Significant Impact

(c) *Existing land uses?* No Significant Impact

(d) *Quantity and distribution of employment?* No Significant Impact

(e) *Distribution and density of population and housing?* No Significant Impact

(f) *Demands for government services?* No Significant Impact

(g) *Industrial and commercial activity?* No Significant Impact

(h) *Utilities?* No Significant Impact

(i) *Transportation?* No Significant Impact

(j) *Safety?* No Significant Impact

(k) *Other appropriate social and economic circumstances?* No Significant Impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts are recognized.

Cumulative Impacts: The area is growing rapidly and demands for groundwater will likely increase. There are no pending permit applications for beneficial water use in the local area.

3. *Describe any mitigation/stipulation measures:* None

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The only alternative to the proposed project is the no action alternative. The no action alternative requires the applicant to use City of Laurel water for irrigation. This impacts the school financially. No significant environmental benefit arises from the no action alternative.

PART III. Conclusion

1. ***Preferred Alternative:*** Issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

2 ***Comments and Responses:*** None

3. ***Finding:***
*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts associated with the proposed utilization of groundwater for lawn and garden irrigation at the Middle School were recognized and therefore an environmental assessment is the appropriate level of analysis.

Name of person(s) responsible for preparation of EA:

Name: Mark Elison
Title: Hydrologist
Date: 9/23/2016